Department of Neighborhood Services Boiler and Mechanical Safety Guidelines for the backflow protection of steam and hot water boilers.

## Examples of approved backflow devices for boilers

A.S.S.E. 1012



A.S.S.E. 1013



A.S.S.E.1013



Department of Neighborhood Services Boiler and Mechanical Safety Guidelines for the backflow protection of steam and hot water boilers.

- Comm 82.41(3) sets forth the requirements for the protection of potable water within water supply systems when and where there is the possibility of contamination due to backflow conditions. The connection of each piece of equipment, appliance or non-potable water piping system shall be designed, installed and maintained in such a manner to prevent the contamination of water supply (this includes boilers).
- Backflow devices must be installed by a licensed plumber. Wisconsin State statutes chapter 145.06(1)(a) states: No person may engage in or work at plumbing in the State of Wisconsin unless licensed to do so by the department.
- Milwaukee code of Ordinances chapter 225-3(4) requires a plumbing permit to install backflow presenters.
- If a chemical pot-feeder or automatic chemical feeder is installed to serve a boiler, it shall be classified a high hazard and will require an ASSE 1013 device.

Type of device required

Table for the selection of backflow protection on boilers		
	High Hazard	Low Hazard
Boilers with a safety valve setting <u>less than</u> 15psi steam or 30psi water	A.S.S.E. 1013	A.S.S.E. 1012
Boilers with a safety valve setting <b>greater</b> than 15psi steam or 30psi water	A.S.S.E. 1013	A.S.S.E. 1013

## **Definitions:**

**<u>High hazard:</u>** means a situation where the water supply system could be contaminated with a toxic solution so as to alter the characteristics of the water making the water unsuitable for the designated use.

**Low hazard:** means a situation where the water supply system could be contaminated with a nontoxic substance so as to alter the characteristics of the water making the water unsuitable for the designated use.

**A.S.S.E. 1012:** is the American Society of Sanitary Engineering standard for a backflow preventer with intermediate atmospheric vents.

**A.S.S.E. 1013:** is the American Society of Sanitary Engineering standard for a reduced pressure principle backflow preventer assembly.